CLAIMS

1. A method for characterizing, according to specific parameters, a sound signal x(t) evolving over the time t during a duration D into different bands of frequencies k and then recorded x(k, t), wherein it consists of storing the signal x(t), of calculating the energy E(k, t) of said signal x(k, t) for each of said bands of frequencies k, k varying from 1 to K and according a temporal window h(t) of a duration of 2N, storing the values obtained of the energy E(k, t) obtained, these values constituting the specific parameters of an extract of a duration of 2N of the sound signal x(t) and of reiterating said calculation at regular intervals in order to obtain the universe of the specific parameters for the duration D of the sound signal x(t).

2. The method according to the above claim, wherein it consists of calculating and storing the energy F(k, j, t) of E(k, t) for the bands of frequencies j, j varying from 1 to J, according to a temporal window h'(t) of a duration of 2N', the J x K values of the energy F(k, j, t) obtained constituting the specific parameters of an extract of a duration of 2N' of the sound signal x(t) and reiterating this calculation at regular intervals in order to obtain the universe of the specific parameters for the duration D of the sound signal x(t).

3. The method according to one of the above claims, wherein it consists of calculating the yielded phase φ(j, k, t) of the energy E(k, t) for the frequency bands j, j varying from 1 to J, and including the values obtained of the yielded phase φ(j,

k, t) obtained among the specific parameters of the sound signal x(t).

4. The method according to one of the above claims, wherein it consists of calculating for each frequency band j the mean value of the energy E(k, t) over 2N' seconds, of reiterating said calculation at regular intervals in order to obtain the universe of specific parameters for the duration D of the sound signal x(t) and of including the mean values obtained among the specific parameters of the sound signal x(t).

5. The method according to one of the above claims, wherein it consists of taking into account the specific parameters of a sound signal x(t) as the components of a vector representative of x(t), of positioning the vectors in a space of as many dimensions as there are parameters, of defining the classes grouping the most proximate vectors and of recording said classes.

6. The method according to the above claim, wherein the classes have inter-class distances and intra-class distances and that it consists of selecting from among the specific parameters, those parameters making it possible to obtain relatively large inter-class distances vis-à-vis the intra-class distances and of recording the selected parameters.

7. A device for identifying a sound signal, wherein it comprises a database server comprising the means for implementing the method for characterizing a sound signal according to specific parameters according to any one of the above claims and means for searching for said sound signal in the database.

8. The device according to the above claim taken in combination with Claim 5 or 6, wherein the means for searching comprise means for recognizing the class to which said sound signal belongs and the means for comparing, by the method of the nearest neighbor algorithm, specific parameters of the unknown sound signal with the specific parameters of the database.